

CLAIMS

1. A method for determining whether a sender seeking to send a message to a receiving computer system via a network is an authorized sender, comprising:
 - receiving from the sender a request to communicate;
 - selecting a number N1;
 - calculating a hash value for the number N1; and
 - sending the hash value to the sender.
2. The method of claim 1, further comprising receiving from the sender a second number N2.
3. The method of claim 2, further comprising calculating a hash value for the number N2.
4. The method of claim 3, further comprising comparing the hash value for the number N1 with the hash value for the number N2.
5. The method of claim 4, further comprising processing a message received from the sender if the hash value for the number N1 matches the hash value for the number N2 sufficiently.
6. The method of claim 5, wherein the hash values are each Y bits long and the hash value for number N1 matches the hash value for the number N2 sufficiently if the first X bits of the hash value for number N1 are the same as the first X bits of the hash value for number N2.

7. The method of claim 4, further comprising not processing a message from the sender if the hash value for the number N1 does not match the hash value for the number N2 sufficiently.

8. The method of claim 1, wherein the number N1 is a random number.

9. The method of claim 1, wherein the number N1 is a random number generated by a pseudo random number generator.

10. The method of claim 1, wherein the hash value is determined by using a cryptographic hash function.

11. The method of claim 10, wherein the cryptographic hash function is the Secure Hash Algorithm (SHA-1).

12. The method of claim 1, further comprising the sender finding a second number N2.

13. A method for determining whether a sender seeking to send a message to a receiving computer system via a network is an authorized sender, comprising:

receiving from the sender a request to communicate, the request to communicate comprising a number N and a timestamp T;

calculating a hash value for the number N and a hash value for the timestamp T; and

determining whether the hash value for the number N matches the hash value for the timestamp T sufficiently.

14. The method of claim 13, further comprising processing a message received from the sender if the hash value for the number N matches the hash value for the timestamp T sufficiently.

15. The method of claim 13, further comprising determining whether the number N has been used in any prior request to communicate.

16. The method of claim 15, further comprising ignoring a message received from the sender if the number N has been used in any prior request to communicate.

17. The method of claim 13, further comprising determining whether the timestamp T is within a prescribed interval of the current time.

18. The method of claim 13, further comprising ignoring a message received from the sender if the timestamp T is not within a prescribed interval of the current time.

19. A system for determining whether a sender seeking to send a message to a receiving computer system via a network is an authorized sender, comprising:

a computer associated with the network configured to receive from the sender a request to communicate, select a number N1, calculate a hash value for the number N1, and send the hash value to the sender.

20. A computer program product for determining whether a sender seeking to send a message to a receiving computer system via a network is an authorized sender, the computer program product being embodied in a computer readable medium and comprising computer instructions for:

receiving from the sender a request to communicate;

selecting a number N1;

